

MEDICINE

## Extract May Save Babies

One in every 170 babies are threatened with Rh blood death which might be averted with a red blood cell extract being made in Baltimore and Pittsburgh.

► A RED blood cell extract which may save babies from Rh blood death is now being made in the Baltimore Rh typing laboratory, Dr. Milton S. Sacks, University of Maryland Medical School scientist who is head of the laboratory, announced at the meeting of the Southern Medical Association at Baltimore.

One in every 170 babies is threatened with this death, the Baltimore laboratory found in a study of some 30,000 expectant mothers.

The death is due to a condition called congenital hemolytic disease of the newborn. It occurs when the unborn baby has inherited Rh positive blood from its father while the mother has Rh negative blood. The mother develops antibodies to her unborn baby's Rh positive blood, just as a person develops antibodies against typhoid germs after vaccination. But these anti-Rh antibodies get into the unborn baby's blood and gradually destroy his red blood cells.

The blood extract Dr. Sacks is working on would neutralize the anti-Rh material in the mother's blood and prevent its harmful effect on the baby. It is made from Rh positive blood cells. It was first made and reported by Mrs. Bettina B. Carter of the Western Pennsylvania Hospital Institute of Pathology at Pittsburgh. Dr. Sacks emphasized that the work is still experimental, and he does not know yet whether the extract will be successful.

Chief weapon doctors now have for fighting the Rh danger is to test the expectant mother's blood so they can be prepared to handle Rh trouble in the baby when it is born. If the mother is Rh negative and develops strongly anti-Rh blood, it may be necessary to change the baby's blood when it is born. This is done by draining all its Rh positive blood and replacing it simultaneously with Rh negative blood.

Persons who have repeated transfusions

of whole blood as well as expectant mothers may have Rh trouble, Dr. Sacks pointed out. Most people, 85%, have Rh positive blood, but if one of the Rh negatives gets many transfusions of Rh positive blood, he will develop antibodies against the latter. Then, when he gets another transfusion of Rh positive blood, he may have a serious reaction.

Mrs. Carter and Dr. Joseph Loughrey, Pittsburgh obstetrician, have been using her red cell extract for a number of months. It has been given to expectant mothers to prevent development of Rh trouble in the babies before they are born and has also been given to babies with this dangerous condition after they were born.

Results have been promising with both methods of giving the extract. It may therefore become both a cure and a preventive. But Mrs. Carter, like Dr. Sacks who has been following her work, says that it is still experimental.

*Science News Letter, December 6, 1947*

MEDICINE

## Lead Poisoning Cured By War Gas Antidote

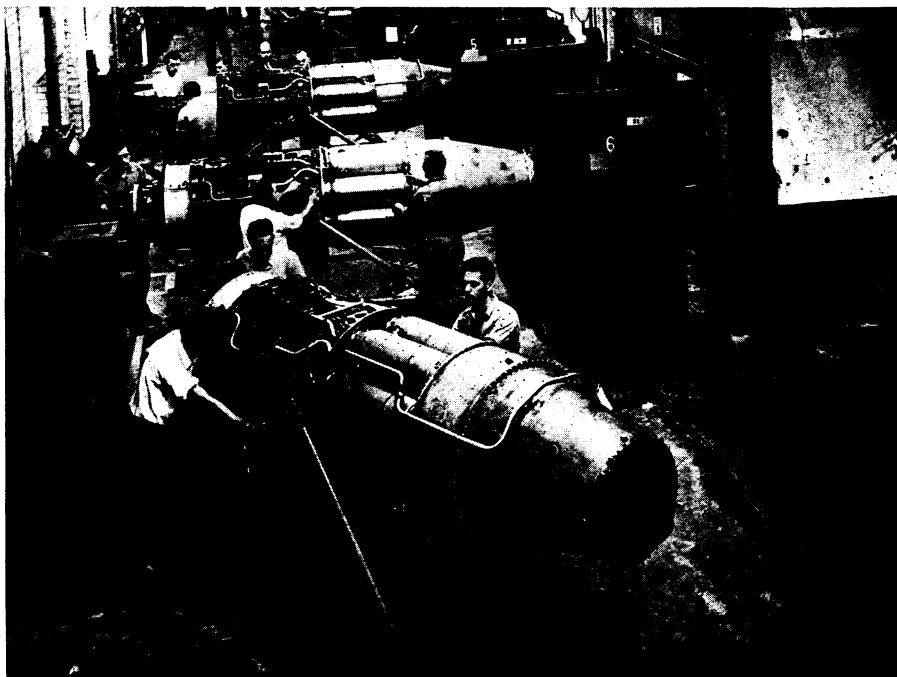
► LEAD poisoning, once rated a hopeless disease afflicting painters, has been cured by use of a chemical developed during the war to combat war gas.

Complete recovery of a lead-poisoned sailor followed his treatment with BAL, or British Anti-Lewisite, the medical profession was told by Dr. James G. Telfer, U. S. Public Health Service surgeon, in a report to the *Journal of the American Medical Association* (Nov. 29).

BAL has proved effective previously in treating poisoning due to mercury, arsenic and other heavy metals. The BAL chemical literally pulls the lead out of the bones and tissues of the victim's body.

The patient was a boatswain who mixed all the paint used on board his ship, making a special effort to get "good lead paint." He mixed the paints in a small, poorly ventilated space and also stated that he sometimes ate without washing the paint off his hands. He was brought to the U. S. Marine Hospital in San Francisco because of his vomiting, diarrhea and cramps.

Lead poisoning was suspected because of his "pasty" appearance, presence of a "lead line," consisting of a narrow margin of tiny gray or black spots near the edge of the gums, pain in the abdomen



**JET ENGINES**—These torpedo-shaped power-plants are used in 10 different types of jet-propelled military aircraft, ranging from single-engine fighters to a series of two, four, six and eight-engined bombers. The Navy's Douglas Skystreak is among the aircraft powered with this jet engine, known in the Air Force as the J-35.